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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,905

07/24/2006

John Godber

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EXAMINER

RUMP, RICHARD M

ART UNIT

PAPER NUMBER

4181

MAIL DATE

DELIVERY MODE

02/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,905	Applicant(s) GODBER ET AL.	
	Examiner Richard M. Rump	Art Unit 4181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 9-23 is/are pending in the application.
- 4a) Of the above claim(s) 12-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1: 09/06/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application

Claims 1-5 and 9-11 are pending and presented for examination. Claims 6-8 and 24-33 were previously cancelled by Applicant. Claims 12-23 are drawn to a non-elected invention. Claims 1-5 and 9-11 were elected by Applicant without traverse. As such, claims 12-23 have been cancelled and **THIS RESTRICTION REQUIREMENT IS MADE FINAL**.

Priority

Acknowledgement is made of applicant's request for foreign priority under 35 U.S.C. §119(a)-(d). Certified copies of the priority documents have been **received**.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 06 September 2006 is acknowledged and the references listed thereon have been considered by the examiner on the attached copy of the PTO-1449 form. However, Applicant is reminded that a search report is not a reference to be cited in an IDS, instead the references contained therein are to be.

Specification

The use of various trademarks throughout this applicant have been noted (See pages 22-24 & 27 specifically Chilsonator™, etc.). It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by C. Pontier, "About the Use of Stoichiometric Hydroxyapatite in Compression Incidence of Manufacturing Process on Compressibility" (Hereinafter referred to as Pontier -- Provided by Applicant).

Regarding claims 1-2, Pontier discloses a composition of a stoichiometric hydroxyapatite (HA) of the formula $(\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2)$. The average (d_{50}) particle size is between 185 and 225 microns (Table 1; paragraph 1 (right hand column)). The solid line on figure 4 (page 253) shows the particle size distribution curves. A solid line is shows that 90% of the particles are smaller than 300 microns and 90% are larger than 10.

Regarding claim 5, the specific surface area (BET) of the 200 micron batch is between 10 and 100 m^2/g (table 2 – specifically $44.6 \pm 4.5 \text{ m}^2/\text{g}$).

Regarding claim 11, given if x is set equal to 0 in the instant claim, the composition disclosed as stated above by Pontier would read upon that instantly claimed. It is stated in the abstract that the composition withstand great compressive loads.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Itoh, *et al.*, “A New Porous Hydroxyapatite Ceramic Prepared by Cold Isostatic Pressing and Sintering Syntehsized Flaky Powder”.

Regarding claims 1-3, Itoh discloses that the average HA particle size is 200 microns and the apparent porosity (density) is 0.7. Since the 200 micron particle size is the average, it would be inherent that 90% of the particles would be greater than 10 and 90% less than 300 at a minimal.

Regarding claim 4, it would be inherent that when a particle is compressed under stresses that the apparent density (compressed) would increase in kind. Given similar properties of the HA (particle size, chemical formula) it would exhibit a similar density under compression. See *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977)

Regarding claim 9, while Pontier does not expressly teach the claimed compressibility profile, it would be inherent that HA of similar properties to the instant claimed invention (particle size and chemical formula) would exhibit the same compressibility profile absent evidence to the contrary. See *In re Best*.

Regarding claim 10, it would be obvious inherent that since water is the universal solvent that HA will dissolve in it given a modification of the temperature to speed up or slow down the rate of dissolve. See In re Best.

Citation of Relevant Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please look at the ISR.

Conclusion

Claims 1-5 and 9-11 stand rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard M. Rump whose telephone number is (571)270-5848. The examiner can normally be reached on Monday through Friday 7:00 AM-4:30 PM (-5 GMT).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571)272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4181

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. M. R./

Examiner, Art Unit 4181

/Vickie Kim/

Supervisory Patent Examiner, Art Unit 4181